

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

GIJSMAN et al

Atty. Ref.: 4662-123

Serial No. 10/563,378

Group: 4171

Filed: January 5, 2006

Examiner: Nguyen

For: **HEAT STABLIZED MOLDING COMPOSITION**

* * * * *

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR 1.131

Sir:

The undersigned, **Pieter GIJSMAN** and **Wilhelmus Josephus Maria SOUR**, hereby jointly declare and state that:

1. We are the same individuals who are named coinventors of the subject matter disclosed and claimed in the above-identified application.
2. The invention as claimed in the above-identified application was completed in The Netherlands, a World Trade Organization (WTO) country, prior to November 15, 2002.
3. As evidence of such prior invention, there are attached hereto date-redacted copies of laboratory records identified as Exhibits A and B that are maintained in the regular course of business by our employer, DSM, the owner of the subject application and the invention claimed therein. Relevant Dutch words in Exhibits A and B have been translated below into English by including the Dutch word in a parenthetical quote adjacent the English translation of the same. Furthermore, the events noted in Exhibit A and Exhibit B were conducted at our direction and under our control.
4. Exhibit A is a copy of relevant pages ("pagina") 1, 5 and 10 of Work Order Number ("Werkordernummer") 524891. As noted on numbered page 5 of Exhibit A, two

compositions were conceived within the scope of the claimed invention in the above-identified application as identified as Main Number ("Monsternummer") 524891006 and 524891007. Exhibit A also notes that a quantity ("Hoeveelheid") of 10 kg of each such composition was to be made.

5. Compositions 524891006 and 524891007 are further described below with reference to the component identifiers employed in Exhibit A:

<u>Material</u>	<u>524891006</u> (wt.%)	<u>524891007</u> (wt.%)	<u>Material Description</u>
k122	64.46	62.79	AKULON [®] polyamide-6 from DSM
pemza		1.67	MZA modified polyethylene
cs 173x 10c 4mm	30.00	30.00	Glass fibers
acrawax c	0.30	0.30	ACRAWAX [®] C N-N' Ethylene Bisstearamide lubricant/release agent from Lonza Inc.
iodide stabilizer 201	0.24	0.24	Copper iodide/potassium iodide in a stearate (80/10/10) from CIBA (Switzerland)
shelfplus o2-2400	5.00	5.00	SHELFPLUS [®] O2-2400 from CIBA (Switzerland) - Masterbatch of ca. 20wt.% α -Fe, 15wt.% NaCl and 2.5wt.% $\text{Na}_2\text{H}_2\text{P}_2\text{O}_7$ in polyethylene (XRF analysis)

6. Numbered page 10 of Exhibit A confirms that each of the compositions 524891006 and 524891007 was actually made by injection molding ("Meetstaat Spultgieten") using the respective conditions as specified under each composition number.
7. Exhibit B is a copy of a Laboratory Task ("Laboratoriumopdracht") report number 430490. Composition 7 under the Main ID Number ("monster nr.") column is identified as "30GF-PA6/Shelfplus (PE-iron) 5" and refers to a polyamide-6 composition containing 30 wt.% glass fibers and 5 wt.% SHELFPLUS[®] O2-2400 masterbatch of polyethylene and iron which is in fact composition 524891007 described in Exhibit A. Exhibit B further confirms that the compositions, including composition 524891007, were actually made and were physically subjected to conditions at "T = 185°C" under "O₂/air" with the counter ("teller") at 2766.

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8. All of the events noted in Exhibit A and Exhibit B attached hereto were actually conducted and occurred in The Netherlands, a WTO country, prior to November 15, 2002. Exhibits A and B thus evidence that compositions within the scope of the claimed invention in the above-identified application were conceived and reduced to practice in a WTO country prior to November 15, 2002.
9. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully Submitted,

Date Signed

Pieter GIJSMAN

18-2-2009

Date Signed

Wilhelmus Josephus Maria SOUR

Werkorder Magic - Voorblad

Werkordernummer . . . : 524891
Titel : Oxidatieve stabiliteit PA 1
Subgrootboekcode. . . : A524891
Betalerscode. . . . :
Opdrachtgever . . . : Sour WJM
Telefoon nummer . . . : 61871
Afdeling. : DEP R&T
Aanvraagdatum . . . :
Verwachte leverweek :
Geplande leverweek. :
Project/Fase nummer :
IVS nummer. : P50034141
Prioriteit. : 55
Klant : Product development
Landcode. : nvt
DPP Afd. code . . . : 8

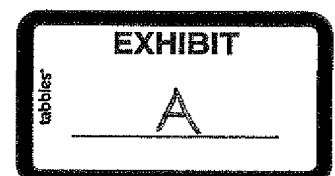
Proces aanwezig	Extern proces (j/n)
* Compounderen Drogen	n
* Spuitgieten Testen	n

Omschrijving:

Met behulp van deze WO worden een aantal toevoegingen in PA6 en PA46 bekeken die zowel de chemische als fysische veroudering tegengaan.

Verzendlijst:

Afdeling	Naam	Afdeling	Naam



Werkorder Magic

-

Samenstellingen in %/delen

Monsternummer	524891001	524891002	524891003	524891004	524891005
Naam	524891-01	524891-02	524891-03	524891-04	524891-05
Extra	TW300	TW300+G21	K224-HG6	HG6+Arntel	HG6+MXD6
Materiaal [procenten] Hoeveelheid [kg]	10	10	10	10	0
arnitel p (weinig stab.)				10.0000	
gemalen ks300	9.2600	9.2600			
ks300 8040315	90.0000	70.0000			
kl22			69.4600	59.4600	59.4600
pemza					
lijnolie					
ad35					
cs 173x-10c 4mm			30.0000	30.0000	30.0000
acrawax c			0.3000	0.3000	0.3000
kaliumjodide	0.6700	0.6700			
koperjodide	0.0700	0.0700			
iodide stabiliser 201			0.2400	0.2400	0.2400
shelfplus o2 - 2400					
peg4000					
sps8012pa					
grivory g21		20.0000			
mxd6					10.0000
Totaal	100.0000	100.0000	100.0000	100.0000	100.0000

Monsternummer	524891006	524891007	524891008	524891009	524891010
Naam	524891-06	524891-07	524891-08	524891-09	524891-10
Extra	HG6+2400	HG62400+PE	HG6+PEG	HG6+SPS	HG6+lijnol
Materiaal [procenten] Hoeveelheid [kg]	10	10	10	10	5
arnitel p (weinig stab.)					
gemalen ks300					
ks300 8040315					
kl22	64.4600	62.7900	64.4600	59.4600	67.4600
pemza		1.6700			
lijnolie					2.0000
ad35					
cs 173x-10c 4mm	30.0000	30.0000	30.0000	30.0000	30.0000
acrawax c	0.3000	0.3000	0.3000	0.3000	0.3000
kaliumjodide					
koperjodide					
iodide stabiliser 201	0.2400	0.2400	0.2400	0.2400	0.2400
shelfplus o2 - 2400	5.0000	5.0000			
peg4000			5.0000		
sps8012pa				10.0000	
grivory g21					
mxd6					
Totaal	100.0000	100.0000	100.0000	100.0000	100.0000

Werkorder Magic

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Meetstaat Spuitgieten

Activiteit: 1-eng75/690-00/690-01A

Monsternummer	524891006	524891007	524891008	524891009	524891010
Naam	524891-06	524891-07	524891-08	524891-09	524891-10
Grootheid [Eenheid]	Samenstelling				
Machine [naam]	Engel 75	Engel 75	vervallen	Engel 75	vervallen
Uitvoerder [naam]	E.Martens	E.Martens		E.Martens	
Matrijs [nr]	690-01A	690-01A		690-01A	
Neus soort [type]	open	open		open	
Neuspunt diameter - lengte [mm - mm]	3.0-60	3.0-60		3.0-60	
Materiaalsoort [naam]	Akulon	Akulon		Akulon	
Materiaaltype [naam]	-	-		-	
Lotnummer [nr]	6	7		9	
Kleur [-]	grijs	grijs		natuur	
Droogtijd [uur]	DAM	DAM		DAM	
Droogtemperatuur [°C]	-	-		-	
Soort stoof [naam]	-	-		-	
Temp. zone 1 (intrek) [°C]	250	250		250	
Temp. zone 2 [°C]	260	260		260	
Temp. zone 3 [°C]	270	270		270	
Temp. zone 4 [°C]	280	280		280	
Temp. zone neus [°C]	280	280		280	
Doseerweg [mm]	71	71		70	
Toerental [omw]	21½=106	21½=106		21½=106	
Stuwdruk [bar]	7.2=75	7.2=75		7.2=75	
Decompressie [mm]	2	2		2	
Injectiesnelheid [mm/sec]	9*35+10	9*35+10		9*35+10	
Injectiedruk [bar]	45.6	54.4		49.2	
Omschikpnt(weg/tijd/Phydr/Fmatr) [keuze]	weg	weg		weg	
Nadruk contactpunt [-]	11	11		11	
Nadruktijd [sec]	15	15		15	
Nadruk [bar]	10*50	10*50		10*50	
Mtrstmp.inj.zde ing. [°C]	83	83		83	
Mtrstmp.inj.zde gem. [°C]	-	-		78	
Mtrstmp.sltzde ing. [°C]	83	83		83	
Mtrstmp.sltzde gem. [°C]	-	-		78	
Koeltijd [sec]	20	20		20	
Injectietijd [sec]	1.83	1.83		1.79	
Plasticeertijd [sec]	12.2	11.7		11.2	
Pauzetijd [sec]	0.5	0.5		0.5	
Cyclustijd [sec]	42.0	41.8		41.8	
Smelttemp. gemeten [°C]	-	-		287	
Shotgewicht [gram]	39.6	36.7		36.2	
Buffer [mm]	7.1	7.6		7.3	
Schroefdiameter [mm]	25	25		25	
Datum [Datum]					



Laboratoriumopdracht

DSM Research

Gerasterde gedeelte niet invullen door inzender

430490

van naam	M. A. A. Schmidt	tel.	60896	bedrijf / afdeling		datum in		code	
aanvrager	M. A. A. Schmidt								
opdracht van intern. research		projectnr.	613443	activiteitnr.		job nr.		naam projectleider	
monster nr.		bedrijf		contractnr.		center		subgrootboekcode	

1	PA16 TW300	Reference
3	PA16 / Grivory 21	80/20
3	304F-PA 6	Reference
4	304F-PA6 / 10 Arnika	←
5	304F-PA6 / MXD6	10 ←
7	304F-PA6 / Shd / plus (PE-iron)	5 ←

8	PA66 (4 bds)	T = 100 h
0	PA66 (bds)	T = 100 h

☐ geen tweede monster beschikbaar

☐ restant monsters s.v.p. retour

eindresultaat te zenden aan

#1	1-11-12-13-14-15
#2	1-6-7-8-9-10
#3	1-11-12-13-14-15
#4	1-6-7-8-9-10-11-12-13-14-15
#5	1-11-12-13-14-15

analyseresultaat	uitgevoerd door	geboekt in
O ₂ (air) T = 185°C		
Wsch 05		
tel. 2766		
ad		
to be compared with copolymer-PA46		
0-reference, only drying		
tijd: 24h		
100h		
200h		
500h		
resultaat accoord		

Veiligheids-aspecten

Aankruisen wat van toepassing is:



licht ontvlambaar

oxyderend

corrosief



giftig

schadelijk

ontplofbaar

EXHIBIT B

430490

991324